

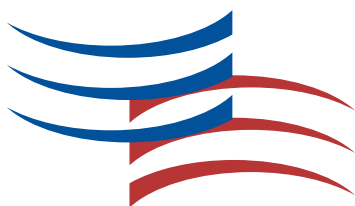


Energy Innovations '99

*Sharing the Benefits of California's
Research Investment*



October 25-27, 1999
Hyatt Islandia on Mission Bay
San Diego



PIER

Public Interest Energy Research

CALIFORNIA ENERGY COMMISSION





The California Energy Commission invites you to attend *Energy Innovations '99...*

Participate in this conference highlighting the nation's most comprehensive ratepayer-funded public interest energy research program. California is investing up to \$62 million annually to stimulate research that benefits Californians through public and private partnerships.

- Meet hundreds of energy innovators, from researchers to investors and consumers
- Explore new opportunities for bringing energy innovations to the marketplace
- Learn to enhance the benefits of public interest energy research in California and in other states

Come to San Diego in October and get involved in this exciting forum on improving California's energy future.

Even as California is moving into its second year in a deregulated electricity market, the State's Public Interest Energy Research (PIER) Program has already developed a robust portfolio of activities and projects advancing science and technology. This event marks the premier opportunity for researchers, investors, public and private officials, and others to learn about the benefits and progress of environmental and energy technology research.

KEY ENERGY LEADERS SPEAK:

Senator Debra Bowen, Chairperson
Senate Energy, Utilities and
Communications Committee
Opening Keynote

Assemblyman Roderick Wright, Chairperson
Assembly Utilities and Commerce
Committee
Opening Keynote

PROGRAM HIGHLIGHTS

- ⚙ Karl Rabago draws on the groundbreaking work of Amory Lovins, Hunter Lovins, and Paul Hawken in their new book, *Natural Capitalism*, and on his energy experience to chart the course of a new energy framework in his presentation entitled "The Energy Flow of Natural Capitalism."
- ⚙ Bill Reichert, President of garage.com, shares his experiences starting several high tech firms including internet, information technology, and life science companies. Garage.com is the leading seed-stage venture financing firm in the U.S., raising over \$60 million funding for 20 companies in the first eight months of 1999.
- ⚙ The focused breakout sessions, which feature results and benefits from projects funded through PIER, are the heart of the conference. Poster sessions will highlight the six program areas, and experts will be on hand to discuss progress and experiences.

Nancy Floyd of Nth Power Technologies, one of the industry's most active venture capital firms, states "You can't ignore the momentum. Angel investors and the traditional venture community are showing renewed interest in energy and environmental start-ups. For more than two decades the California Energy Commission has been a leader of energy innovation, technology transfer and a facilitator for implementing new technologies which increase consumer benefits."



PRELIMINARY AGENDA

Monday ☼ October 25, 1999

10:00 a.m.	Registration	Regency Ballroom Foyer
1:00 p.m. – 2:30 p.m.	Opening Session and Keynote Speakers, <i>Senator Debra Bowen and Assemblyman Roderick Wright</i>	Regency Ballroom
2:30 p.m.	Break	
3:00 p.m. – 5:30 p.m.	Opening Session continues	Regency Ballroom
5:30 p.m. – 7:30 p.m.	Poster Session and Reception	Regency Ballroom Annex

Tuesday ☼ October 26, 1999

7:00 a.m.	Registration and Continental Breakfast	Regency Ballroom Foyer
8:00 a.m. – 12:00 p.m.	Breakout Sessions	Regency Ballroom A,B,C
10:00 a.m.	Break	
12:00 p.m.	Buffet Luncheon and Speaker, <i>Mr. Bill Reichert</i>	Mission Ballroom
1:30 p.m. – 3:30 p.m.	Breakout Sessions	Regency Ballroom A,B,C
3:30 p.m.	Break	
4:00 p.m.	Reconvene in General Session	Regency Ballroom
5:30 p.m.	Banquet and Speaker, <i>Mr. Karl Rabago</i>	Mission Ballroom

Wednesday ☼ October 27, 1999

7:00 a.m. – 8:00 a.m.	Registration and Continental Breakfast	Regency Ballroom Foyer
8:00 a.m.	General Session	Regency Ballroom
12:00 p.m.	Meeting Adjourns	
TBD (afternoon)	Optional Site Visit/Tour of Local Energy Research Facility	

Thursday ☼ October 28, 1999 (Related activities after the conference)

8:00 a.m. – 4:30 p.m.	Energy Commission & EPRI Workshop: <i>Impacts of New Generation in California — Technology transfer, siting issues, and operational and system performance are critical in developing new generation systems and addressing strategic directions for California's electric system</i>	Regency Ballroom
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GENERAL SESSION SPEAKERS AND TOPICS

California Energy Commission — Highlighting the Nation's Most Comprehensive Ratepayer-funded Public Interest Energy Research Program (Monday)

Research, Development & Demonstration Committee
Commission Vice Chairman David A. Rohy, Ph.D., Committee Chair
Commissioner Robert A. Laurie, Committee Member

Energy Commission's PIER Program

Mr. Ron Kukulka, PIER Program Manager
Mr. Ben Mehta, *Industrial/Agricultural/Water End-Use Energy Efficiency*
Mr. George Simons, *Renewable Energy Technology*
Mr. Kelly Birkinshaw, *Energy-Related Environmental Research*
Mr. Mike Batham, *Environmentally Preferred Advanced Generation*
Ms. Nancy Jenkins, *Building End-Use Energy Efficiency*
Mr. Tom Tanton, *Strategic Energy Research*
Mr. Philip Misemer, *Energy Innovations Small Grants*

Transferable Knowledge from Other Forums (Tuesday)

Dr. Lawrence (Marty) Murphy, National Renewable Energy Laboratory, *Lessons Learned in NREL Industry Growth Forums and the Path Forward*
Ms. Janet Joseph, New York State Energy Research and Development Authority, *Where We Are and Where We're Going*
Mr. Keith Davidson, Onsite Sycom Energy Corp., *Gaining Market Acceptance of Innovative Technologies*

Building Bridges Connecting Research Results to Consumer Benefits (Wednesday)

Ms. Marcia Rorke, Mohawk Research Corp.
Mr. Ken Gudger, Global Energy Partners
Mr. Jerome Foster, Pentech Energy Solutions
Dr. Jeff Colborn, Metallic Power, Inc.

Also on the Program...

Synergy with Other Programs

Renewable Technology Program at the Energy Commission
California Board for Energy Efficiency
Electric Power Research Institute
United States Department of Energy
Gas Research Institute

Other Special Invited Guests

Mary Nichols, California Secretary for Resources
Albert Einstein, Alive!

Energy Commission & Electric Power Research Institute (EPRI) Workshop — Impacts of New Generation in California

For more information contact:
Peter Mueller, EPRI, 650-855-2586, email: pmueller@epri.com

Breakout Sessions for Tuesday, October 26th

7:00 a.m.	REGISTRATION AND CONTINENTAL BREAKFAST <i>Regency Ballroom Foyer</i>		
8:00 a.m.	Regency Ballroom A Panel I – Renewable Energy Technology I.A. Making Renewable Energy Technologies Cost-Competitive in California's Deregulated Electricity Marketplace Moderator: Mr. Marwan Masri, California Energy Commission <i>Dr. Larry Berg, Larry Berg & Associates</i> <i>Mr. Joel Davidson, Solutions</i> <i>Mr. Steve Gatto, BCI</i>	Regency Ballroom B Panel II – Environmentally Preferred Advanced Generation (EPAG): What is the Role for EPAG in Satisfying California's Increasing Need for Distributed Generation (DG)? Moderator: Mr. Mike Batham, California Energy Commission II.A. Energy Providers: How are Energy Providers Planning to Use EPAG in DG Applications? <i>Mr. David Berokoff, Southern California Gas</i> <i>Mr. Mike Burke, NewEnergy</i> <i>Mr. Al Figueroa, San Diego Gas and Electric and California Utility Research Council</i> <i>Mr. Don Osborn, * Sacramento Municipal Utility District</i>	Regency Ballroom C Panel III – Building End-Use Energy Efficiency III.A. Technologies and Strategies for Buildings in Hot Inland Climates Moderator: Mr. Gregory Thomas, Gregory Thomas and Associates <i>Mr. Lance Elberling, Pacific Gas & Electric Company</i> <i>Mr. Randy Folts, Pulte Homes Corporation</i> <i>Dr. Malcolm Lewis, Constructive Technologies Group, Inc.</i>
9:00 a.m.	I.B. Can Renewable Energy Technologies Meet Customer Needs as Distributed Generators in California? Moderator: Mr. Pramod Kulkarni, California Energy Commission <i>Mr. Thomas Hoff, Clean Power Research</i> <i>Ms. Jan Pepper, California Power Exchange</i>	II.B. Manufacturing and Technology Deployment: What are the Future Product Research, Development, and Deployment Needs for EPAG Technology Manufacturers? <i>Mr. David McShane, * Capstone Turbine Corporation</i> <i>Mr. Thomas Morjig, Catalytica</i> <i>Mr. Mark Skowronski, Allied Signal</i> <i>Mr. Ron Wolk, Wolk Integrated Technical Services</i> <i>Ms. Kim Zentz, Avista Labs</i>	III.B. Drivers for Energy Efficiency: Comfort, Productivity, Health, and Safety Moderator: Mr. Randel Riedel, California Energy Commission <i>Dr. Cliff Federspiel, * Center for the Built Environment, University of California at Berkeley</i> <i>Ms. Lisa Hescong, IES, The Hescong Mahone Group</i> <i>Mr. Gregory Thomas, Gregory Thomas and Associates</i>
10:00 a.m.	---- Break ----		
10:30 a.m.	I.C. The Role of Non-energy Benefits in Making Renewable Energy Technologies Sustainable Moderator: Mr. George Simons, California Energy Commission <i>Ms. Nancy Rader, Nancy Rader Renewable Energy Consulting</i> <i>Dr. Tom DinWoody, * PowerLight Corporation</i> <i>Mr. Loyd Forest, TSS Consulting</i>	II.C. R&D Organizations: What are the Current and Planned R&D Programs to Support EPAG Technology Development in DG Applications? <i>Ms. Patricia Hoffman, * U.S. Department of Energy</i> <i>Mr. William Liss, Gas Research Institute</i> <i>Mr. Daniel Rastler, * EPRI</i> <i>Dr. Scott Samuels, National Fuel Cell Research Center, UC Irvine</i>	III.C. How Energy Efficiency Can Affect Affordability and Property Value Moderator: Mr. Gregory Thomas, Gregory Thomas and Associates <i>Mr. Eric Haftner, ELH Development</i> <i>Mr. Rob Hammon, ComfortWise</i> <i>Mr. Rick Nevin, ICF Consulting Group</i>
12:00	BUFFET LUNCHEON AND SPEAKER <i>Mission Ballroom</i>		
1:30 p.m.	Regency Ballroom A Panel IV – Food/Agriculture/Industrial/Water Energy Efficiency IV.A. Water: Issue of the New Millennium Moderator: Mr. Wendell Bakken, California Energy Commission <i>Mr. Keith Carns, EPRI</i> <i>Mr. Jeff DeZeller, Metropolitan Water District</i> <i>Mr. Lory Larson, Southern California Edison</i> <i>Dr. Greg Leslie, Orange County Water District</i>	Regency Ballroom B Panel V – Strategic Research Moderator: Mr. Tom Tanton, California Energy Commission V.A. Feet Firmly Planted on the Ground (Near Term Benefits) <i>Mr. Joseph Eto, Lawrence Berkeley National Laboratory</i> <i>Mr. Art Iverson, COREOLIS</i> <i>Dr. William "Woody" Savage, Pacific Gas and Electric Company</i>	Regency Ballroom C Panel VI – Energy-Related Environmental Research VI.A. Solutions to Current/Expected Environmental Issues Moderator: Mr. David Maul, California Energy Commission <i>Mr. Winston Chow, EPRI</i> <i>Dr. Jim Young, Southern California Edison</i> <i>Mr. Don Rose, Semptra Energy</i>
2:30 p.m.	IV.B. Innovations in Food and Agricultural Production Systems Moderator: Mr. Ricardo Amon, California Energy Commission <i>Dr. Charles Burt, CalPoly San Luis Obispo University</i> <i>Dr. Dee Gram, R and D Enterprises</i> <i>Mr. Alan Pryor, SoilZONE Inc.</i> <i>Dr. Sharon Shoemaker, California Institute of Food and Agriculture Research (CIFAR) at UC Davis</i>	V.B. Eyes on the Stars (Incorporating the Long View) <i>Dr. Alexander Glass, Executive Director, Bay Area Regional Technology Alliance</i> <i>Mr. Dave Hawkins, California's Independent System Operator</i> <i>Mr. Dave Lema, Special Advisor to the Governor</i> <i>Dr. Gail McCarthy, EPRI</i>	VI.B. A New Perspective: New Approaches to Issue Resolution Moderator: Mr. James Cole, University of California President's Office <i>Mr. Kelly Birkinshaw, California Energy Commission</i> <i>Mr. Paul Chu, PISCES, EPRI</i> <i>Dr. Norman Miller, Lawrence Berkeley National Laboratory</i>
3:30 p.m.	---- Break ----		
4:00 p.m.	RECONVENE IN GENERAL SESSION <i>Regency Ballroom</i>		
5:30 p.m.	BANQUET AND SPEAKER <i>Mission Ballroom</i>		

*Invited, but not yet confirmed.

Conference Logistics

Beautiful San Diego is considered the birthplace of California. In addition to a perfect climate, sandy beaches, and waterfront activities, you'll discover a city rich in culture, nationally recognized theatre, the largest concentration of museums west of the Mississippi, and a lively downtown with award-winning restaurants.

The conference will be held at the Hyatt Islandia. Nestled in the heart of Mission Bay, the Hyatt Islandia is framed by San Diego's legendary Balboa Park, San Diego Zoo, Sea World, Old Town, Mexico, and miles of scenic coastline.

MEETING LOCATION

The Hyatt Islandia
1441 Quivira Road
San Diego, CA 92109-7898
Telephone: 619-224-1234
TeleFax: 619-224-0348



HOTEL ACCOMMODATIONS

A block of hotel rooms has been reserved at the Hyatt Islandia Hotel. Participants can contact the hotel directly at 619-224-1234 or phone the toll free reservations line at 1-800-233-1234 to make reservations. [The cutoff date for the conference rate is October 1, 1999.](#) Be sure to identify yourself as a member of the *Energy Innovations '99* conference to receive the special conference rate of \$150.00 plus tax. Limited government rates are available. State or federal ID will be required to take advantage of these rates. After October 1, 1999, any reservation requests made will be accepted on a space available basis only. [Availability is not guaranteed, so reserve early.](#)

REGISTRATION

All participants must register for the meeting using the enclosed registration form. To obtain the reduced registration rate, return the form with your registration fee of \$199.00 by [October 8, 1999](#). Registrations received after October 8, 1999, and on-site registration, will be accepted at the late fee amount of \$245.00. Advance registration is encouraged.

On-site registration will take place in the Hyatt Islandia on Monday, October 25, 1999, from 10:00 a.m. to 1:00 p.m. and will begin again on Tuesday, October 26, 1999, at 7:00 a.m.

GROUND TRANSPORTATION

Cloud 9 Shuttle (1-800-9-SHUTTLE or 1-800-974-8885) provides service from the San Diego Airport to the Hyatt Islandia at a rate of \$8. After claiming your luggage, follow the signs to the Ground Transportation Skybridge. Proceed to the "Shuttle for Hire" curb and ask the Transportation Coordinator for Cloud 9 Shuttle by name.

SPECIAL ASSISTANCE

In compliance with the Americans with Disabilities Act, the conference organizers will make all reasonable efforts to accommodate persons with disabilities at the meeting.

Questions?

Technical or Program Issues

Ms. Kat Calhoun

Phone: 916-654-4033

Fax: 916-654-4420

E-mail: kcalhoun@energy.state.ca.us

Logistics/Registration

Ms. Carla Post

Phone: 301-228-3128

Fax: 301-698-6188

E-mail: postc@saic.com



California Energy Commission

William J. Keese, Chairman

David A. Rohy, Ph.D., Vice Chairman

Robert A. Laurie, Commissioner

Michal C. Moore, Commissioner

Robert Pernell, Commissioner

Energy Innovations '99

California Energy Commission

1516 Ninth Street, MS #6

Sacramento, CA 95814

ENERGY INNOVATIONS '99

**FAX YOUR REGISTRATION TODAY!
ADVANCED REGISTRATION ENDS OCTOBER 8.**

October 25-27, 1999

To Register, please complete this form. AFFIX YOUR BUSINESS CARD or PRINT. This information will be used to create your name badge. PLEASE SPELL OUT YOUR ORGANIZATION'S NAME. PLEASE READ ALL INSTRUCTIONS BEFORE SUBMITTING YOUR REGISTRATION.

_____										_____									
First Name										Last Name									

Title																			
_____															<i>Make photocopies for additional registrants</i>				
Agency or Company Name																			

Address 1																			
_____										_____									
Address 2										Mail Stop/Mail Code									
_____										_____									
City										State					Zip				
_____										_____					_____				
Phone Number										Fax									
_____										_____									
E-mail Address																			

1. TO REGISTER

**MAIL: Energy Innovations '99
SAIC Travel-Conference Services**

1710 Goodridge Drive, m/s 1-1-3
McLean, VA 22102

FAX: 703-356-2714 or 703-760-0654

E-mail: lee.ann.adams@cpmx.saic.com

Phone: 1-800-537-6074 or 703-749-8780

*If phoning for information, please identify yourself as an
Energy Innovation meeting attendee. Phones are answered
between 8:00 AM and 5:30 PM (EST).*

2. REGISTRATION FEES

INDIVIDUAL REGISTRATION

- | | |
|---|--|
| <input type="checkbox"/> \$199 Advanced
(By October 8) | <input type="checkbox"/> \$245 On-site
(After October 8 or on-site) |
|---|--|

3. INDICATE METHOD OF PAYMENT

- ☐ **Check Enclosed.** Make check payable to **SAIC**
(Please reference Energy Innovations '99 on check)

- ☐ **VISA/Mastercard/AMEX card #** _____
Name on card _____
Signature _____

*Signature confirms cardholder's understanding and agreement with
registration fees and cancellation/refund policies.*

TOTAL PAYMENT ENCLOSED: \$ _____

FEDERAL ID # 95-3630868

4. CANCELLATION POLICY

Cancellations must be submitted in writing; phone cancellations will not be accepted. No refunds or cancellations after October 4, 1999. Substitutions will be accepted and are encouraged. Call with the name change.

5. ATTENDEE PROFILE

Please indicate one of the following:

- | | |
|--|--|
| <input type="checkbox"/> Federal Agency | <input type="checkbox"/> Industry |
| <input type="checkbox"/> National Laboratory | <input type="checkbox"/> Equipment Manufacturer |
| <input type="checkbox"/> State/Local Government | <input type="checkbox"/> Finance or Business |
| <input type="checkbox"/> University or College | <input type="checkbox"/> Energy Services Provider |
| <input type="checkbox"/> Public Interest Group | <input type="checkbox"/> Public or Private Utility |
| <input type="checkbox"/> Non-profit Organization | <input type="checkbox"/> PIER Project Participant |
| <input type="checkbox"/> Association | <input type="checkbox"/> Other _____ |

6. MEAL PREFERENCE

(for Tuesday's banquet)

- ☐ Chicken ☐ Fish ☐ Vegetarian ☐ Beef

7. OPTIONS

With my registration confirmation, please send more information about:

- ☐ Wednesday afternoon optional site tours
☐ Thursday optional workshop: Impacts of New Generation

***Special Accommodations:** It is important that you enjoy the meeting. If due to a physical challenge you have any special needs, accommodations or requirements, please let us know and we will do our best to accommodate you.